

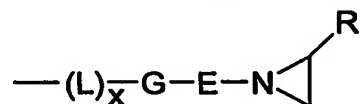
**Claims:****1. Dental composition comprising with respect to the cured composition**

5 N-alkyl aziridine polyether as component A,

SO<sub>2</sub>-NH group containing component B

Initiator C,

optionally additives D comprising modifiers, fillers, dyes, pigments, thixotropic  
agents, flow improvers, polymeric thickeners, surfactants, odorous  
10 substances, diluting agent(s) and flavourings.

**2. The composition according to claim 1, wherein component A comprises a structure element represented by the following formula**

15 wherein

R represents H, C<sub>1</sub>-C<sub>12</sub> alkyl, C<sub>2</sub>-C<sub>12</sub> alkenyl, C<sub>2</sub>-C<sub>12</sub> alkynyl, C<sub>7</sub>-C<sub>15</sub> alkylaryl,  
C<sub>7</sub>-C<sub>15</sub> arylalkyl, C<sub>3</sub>-C<sub>12</sub> cycloalkyl, and wherein hydrogen atoms may be  
replaced by Cl or F and/or wherein up to five carbon atoms may be replaced  
by atoms or group of atoms selected from O, CO, N, S,

20 E represents a C<sub>1</sub> - C<sub>18</sub> branched or unbranched hydrocarbon chain wherein  
up to five carbon atoms may be replaced by atoms or group of atoms selected  
from O, CO, N, S,

G represents a group selected from C(O)O, C(O)NR, C(O), C(O)C(O),  
C(O)(CH<sub>2</sub>)<sub>m</sub>C(O) with m = 1 to 10, C(S)NR, CH<sub>2</sub>,

25 L represents O, S, NR with x = 0 or 1.

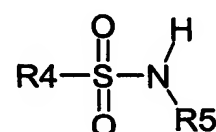
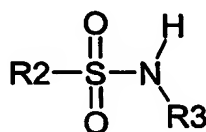
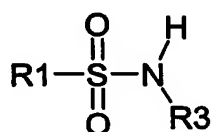
**3. The composition according to anyone of the preceding claims comprising component B in an amount of about 0,01 % by weight to about 20,00 % by weight.**

4. The composition according to anyone of the preceding claims wherein component B comprises aryl sulfonic acid amides and/or alkyl sulfonic acid amides.

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5. The composition according to anyone of the preceding claims wherein component B comprises N-alkyl or N-aryl substituted aryl sulfonic acid amides and/or N-alkyl or N-aryl substituted alkyl sulfonic acid amides.

- 10 6. The composition according to anyone of the preceding claims, wherein component B is represented by at least one of the following formulas:



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wherein

R1 represents C<sub>1</sub>-C<sub>22</sub> alkyl, C<sub>2</sub>-C<sub>22</sub> alkenyl, C<sub>2</sub>-C<sub>22</sub> alkynyl, C<sub>7</sub>-C<sub>22</sub> arylalkyl or C<sub>3</sub>-C<sub>22</sub> cycloalkyl, and wherein one or more hydrogen atoms may be replaced by Cl or F and/or up to five carbon atoms may be replaced by atoms or group of atoms selected from O, CO, N, S,

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R2 represents C<sub>6</sub>-C<sub>18</sub> aryl, C<sub>7</sub>-C<sub>22</sub> alkylaryl, C<sub>2</sub>-C<sub>22</sub> cycloalkylaryl, C<sub>7</sub>-C<sub>22</sub> alkenylaryl or C<sub>7</sub>-C<sub>22</sub> alkynylaryl, wherein one or more hydrogen atoms may be replaced by Cl or F and/or up to five carbon atoms may be replaced by atoms or group of atoms selected from O, CO, N, S,

R3 represents H, R1 or R2.

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R4 is R1 or R2,

and R5 represents the chemical linkage to a polymer.

7. The composition according to anyone of the preceding claims, wherein the molecular weight of component B is in the range of 90 to 2000  $\text{gmol}^{-1}$ .
- 5 8. The composition according to anyone of the preceding claims, wherein component B comprises benzene sulfonic acid N-butyl amide or p-toluene sulfonic acid N-ethyl amide, o-toluene sulfonic acid N-ethyl amide, benzene sulfonic acid amide or a mixture of o-/p- toluene sulfonic acid N-ethyl amide.
- 10 9. The composition according to anyone of the preceding claims, wherein initiator C is selected from the group of protonating or alkylating agents or wherein the initiator C generates protons and/or reactive alkylating agents in a chemical reaction.
- 15 10. The composition according to anyone of the preceding claims having a working time at 23 °C of equal or less than 3:30 min according to DIN EN ISO 4823:2000 and/or an oral setting time of equal or less than 3:30 min
- 20 11. Kit of parts, comprising a base and a catalyst part, wherein the base part comprises component A, the catalyst part comprises component C, and wherein component B is present either in the base part or the catalyst part or in the base part and the catalyst part, wherein components A, B and C have the meaning as defined in the preceding claims.
- 25 12. Kit of parts, wherein the base part comprises component A, the catalyst part comprises component C, and wherein component B is comprised in a further part and neither comprised in the catalyst part nor in the base part, wherein components A, B and C have the meaning as defined in the preceding claims.
- 30 13. Method of producing a dental composition according to one of the claims 1 to 10 comprising the steps a) providing components A, B and C, b) mixing the components.

14. Use of a component B containing composition for enhancing the speed of set of a component A and C containing dental composition, wherein components A, B and C have the meaning as defined in the preceding claims.

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15. Use of the composition according to anyone of claims 1 to 9 or the kit of parts according to claim 10 or 11 for modeling of objects or body parts, preferably as dental impression, bite registration or dental duplicating material.

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